

**Request to Archive  
With The National Centers for Environmental Information  
For CrIS Outgoing Longwave Radiation (OLR) from NDE  
Provided by OSPO**

**2014-05-08**

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

**1. Who is the primary point of contact for this request?**

Tom King  
NESDIS/STAR  
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thomas.s.king@noaa.gov

**2. Name the organization or group responsible for creating the dataset.**

DOC/NOAA/NESDIS/OSPO

**3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.**

The data to be archived are fluxes of Outgoing Longwave Radiation (OLR) derived from the CrIS instrument (aboard the S-NPP/JPSS series of satellites). Associated with these flux data are quality and geolocation information. The input data are the CrIS SDR and Geolocation HDF5 files (currently archived at CLASS). The OLR data files are granules are 32 seconds in length. The spatial coverage is global with a resolution of 25km. As S-NPP is a polar orbiting satellite, temporal coverage is continuous with the same position on the Earth being seen every 28 days.

**4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)**

From 2014-09-15  
Ongoing as continuous updates to the data record

**5. Edition or version number(s) of the dataset:**

Version 1

**6. Describe the level to which the data are processed. For example, are these unprocessed raw observations, derived parameters, quality controlled or inter-calibrated data, etc.?**

The input data are CrIS SDR data. These data are already calibrated, geolocated, and apodized radiances. The CrIS OLR processing integrates these SDR radiance data and applies a regression tuning to produce a single OLR for each CrIS field of view (FOV). These OLR data are considered to be a level 2 data product. The input and output data are at the same spatial and temporal resolution as the input SDR data, but spectrally they are different because OLR is an integrated radiance.

**7. Approximate date when the dataset was or will be released to the public:**

2014-09-15

**8. Who are the expected users of the archived data? How will the archived data be used?**

The main user is the Climate Prediction Center. These data would be used for research and reprocessing efforts.

**9. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?**

The CrIS OLR data are currently being evaluated by the Climate Prediction Center (CPC). The CPC user contact is Craig Long. CPC has evaluated and is currently using IASI OLR generated from the same algorithm (and also archived at CLASS).

**10. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?**

The CrIS OLR dataset is generated from the same algorithm currently used for IASI OLR. IASI OLR for MetOp-A is currently archived at CLASS with MetOp-B and C to follow. This provides consistency as a climate dataset.

**11. List the input datasets and ancillary information used to produce the data.**

The input data are the CrIS SDR HDF5 radiance and geolocation data (currently archived at CLASS under an existing SA). These files are produced by the IDPS. The input data files are granules that are 32 seconds in length. CrIS resides on the S-NPP platforms, but will also be present on the JPSS platforms.

**12. List web pages and other links that provide information on the data.**

The metadata are to be ISO-19115 compliant. The metadata will be inserted into the header of the netCDF4 file as global variables. This approach was developed between STAR, NDE, and Ted Habermann at NGDC. The data content of the files is CF-compliant.

**13. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.**

1. An NOAA Unique CrIS/ATMS Product System (NUCAPS) products Users Manual is available, but it has to be requested from the Product Area Lead (PAL). The PAL is Awdhesh Sharma (Awdhesh.Sharma@noaa.gov) at OSPO.

**14. Indicate the data file format(s).**

1. netCDF-4

**15. Are the data files compressed?**

No

**16. Provide details on how the files are named and how they are organized (e.g., file\_name\_pattern\_YYYYMM.tar in monthly aggregations).**

NUCAPS-OLR\_v1r0\_npp\_sYYYYMMDDhhmmss\_eYYYYMMDDhhmmss\_cYYYYMMDDhhmmss.nc

where:

NUCAPS-OLR - NOAA Unique CrIS/ATMS Product System (NUCAPS) Outgoing Longwave Radiation (OLR)

"\_" - these are the field delimiters

v1r0 - Version 1, Release 0

npp - Suomi-NPP satellite ID

s - starting observation date/time string indicator

e - ending observation date/time string indicator

c - file creation date/time string indicator

YYYYMMDDhhmmss - date/time string where:

YYYY - 4 digit year

MM - 2 digit month of year (1-12)

DD - 2 digit day of month (1-31)

hh - hour of day (0-23)

mm - minute of hour (0-59)

sss - seconds to the tenth of second precision (e.g. "145" = 14.5 seconds)

nc - netCDF format extension

**17. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?**

For sample data please contact me (Thomas King - Thomas.S.King@noaa.gov). I can supply data continuously on a server (ftp2.orbit.nesdis.noaa.gov). The server can be accessed via anonymous ftp.

**18. What is the total data volume to be submitted?**

**Continuous Data: data volume rate for a continuous data production.**

Total Data Volume Rate: 93MB per Day

Data File Frequency: 2700 per Day

Data Production Start: 2014-09-15

**19. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.**

No additional updates, revisions or replacement data are anticipated.

**20. Describe the server that will connect to the ingest server at NCEI for submitting the data.**

Physical Location: Silver Spring, MD

System Name: NDE DHS (subsystem at ESPC)

System Owner: NESDIS OSPO

Additional Information:

**21. What are the possible methods for submitting the data to NCEI? Select all that apply.**

1. FTP PULL
2. FTP PUSH

**22. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.**

1. Unknown
2. User interface to order and stage data for download
3. Direct download links

**23. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?**

No known constraints apply to the data.

**24. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.**

These data will be produced operationally (at OSPO) for the Climate Prediction Center (CPC). The CPC contact is Craig Long. He has specifically requested that these data be archived at NCDC. They would like to retain these data for research and reprocessing efforts. The CrIS OLR will provide continuity to the IASI OLR product produced with

the same algorithm.

**25. Are the data archived at another facility or are there plans to do so? Please explain.**

No

**26. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?**

These data will be produced operationally by OSPO for the Climate Prediction Center (CPC). The CPC contact is Craig Long. He has specifically requested that these data be archived at NCDC.

**27. Do you have a data management plan for your data?**

No

**28. Have funds been allocated to archive the data at NCEI?**

JPSS funds are available for archiving

**29. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.**

N/A

**30. Is there a desired deadline for NCEI to archive and provide access to the data?**

Archive by: 2014-10-01

Accessible by:

**31. Add any other pertinent information for this request.**

None